

## ABSTRACT

A multifunctional energy-adjustable net control air conditioner combines several flow loops a one pipeline system. Thereby, in winter, or low temperature days, it is used as a heater. The heat can provides hot water and vapor. Three way servo valves are used as switches so that air conditioner can be used in all the years without needing boiler. No cooling tower is used since the heat source in the high pressure side is absorbed by heat exchangers. The multifunctional air conditioner is used with multifunctional exchangers so as to have a preferred effect. The multifunctional energy-adjustable net control air conditioner can be used to conventional, frequency varied or DC elements so as to save power.